LEVERAGING DIGITAL COLLEAGUES FOR ENTERPRISE VALUE

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Digital colleagues—AI-enabled systems that collaborate with humans to perform complex work—are rapidly transitioning from experimentation to an embedded enterprise capability. Unlike traditional automation or reactive AI assistants, digital colleagues integrate generative AI, agentic systems, machine learning, use of enterprise data, and embedded governance mechanisms to function as members of human teams. They may perform tasks autonomously, engage in dialogue, learn over time, operate continuously, and escalate consequential decisions to humans.

MIT CISR surveyed 132 organizations in September 2025 and engaged executives in interactive presentations from late 2025 to early 2026 to begin to understand how enterprises are deploying, governing, and capturing value from digital colleagues.[1] Here are four findings from our research to date:

1. Enterprises are already embedding digital colleagues in core work. The question is no longer whether to adopt digital colleagues but when, and how and where to govern and scale them.
2. Seventy-five percent of respondents to our survey predicted an average twenty-five percent increase of revenue per employee over three years (the median increase was fifteen percent per employee).
3. Most of the enterprises in our research are presently optimizing for efficiency; few are redesigning for growth. Achieving long-term revenue expectations will require new business models[2] and pricing approaches and cross-functional orchestration.
4. The enterprises in the research that are doing major redesigns of work, governance, and enterprise systems for growth (fewer than 20 percent) expect to capture the most value from evolving their business models. Digital colleagues used in this pursuit must be governed transparently, with clear human oversight and defined escalation paths. Human accountability will be non-negotiable; the development of legal and ethical frameworks for non-human actors is still in early stages, so creating trust continues to depend on humans being responsible.

This briefing describes digital colleagues, where value from their use is emerging, and the organizational choices that distinguish higher-performing enterprises.

THE DIFFERENCE BETWEEN ASSISTANTS AND DIGITAL COLLEAGUES

We propose differentiating AI assistants from digital colleagues. AI assistants are reactive; when prompted, they summarize, draft, search, and analyze. Digital colleagues go further. They collaborate with humans as part of a workflow, break tasks into subtasks, connect across systems, act with agency, and operate within defined governance boundaries.

A digital colleague:

- Combines multiple AI tools and enterprise rules and data
- Performs tasks autonomously and acts as a discussion partner
- Is auditable
- Learns from interaction
- Seeks human approval for consequential decisions
- Is managed more like an employee than a tool

The line between assistant and colleague is often blurry, but the distinction matters.[3] When AI is positioned as a tool, organizations optimize prompts. When AI is positioned as a colleague, organizations redesign work.

RISING INTEREST AND ADOPTION BUT UNEVEN MATURITY

Over a fifth of the enterprises we surveyed reported active use of digital colleagues with uneven implementations.

1 For a full description of the research underpinning this briefing, see How We Approached This Project on page 2.

2 See P. Weill, I. M. Sebastian, S. L. Woerner, and G. Benedict, "Business Models in the AI Era," MIT CISR Research Briefing, Vol. XXV, No. 10, October 2025.

3 The rapid pace of change in this space makes the boundaries of "digital colleagues" difficult to define. While some research and session participants included AI agents in that definition, the perspective was not shared consistently.

Governance models ranged from informal oversight to enterprise-wide structures. Importantly, to support governance and ensure accountability, most enterprises maintained humans in the loop for the majority of digital colleague decisions; only a fraction of enterprises significantly redesigned workflows to support AI-enabled operations. Measures of value were nascent, with many enterprises relying on pilot-level metrics rather than enterprise-level performance indicators. Most enterprises were not yet charging clients explicitly for work performed by digital colleagues because they don't know how to assign captured value, they may not want to disclose to clients that they are using digital colleagues, it upends the standard pricing model, or a combination of these and other reasons.

REVENUE EXPECTATIONS NEAR TERM AND LONG TERM

Our surveyed enterprises had modest expectations for growth of revenue per employee in the next year attributable to digital colleagues: A majority expected little change, while others anticipated single-digit improvement. In contrast, their three-year projections were significantly more ambitious: while 18 percent believed that in three years revenue per employee will remain the same, 75 percent predicted an average increase of 25 percent. This gap highlights a strategic tension: near-term efforts focus on efficiency, while longer-term ambitions assume structural transformation.

The changes that support this increase will put pressure on pricing models for enterprise services. Customers are demanding to share in the "AI dividend" and expecting lower prices, given that less human time is required for the work. This is challenging enterprises to move to pricing models based on things like value creation, particularly in the professional services industry.[4]

AREAS WHERE DIGITAL COLLEAGUES CREATE VALUE TODAY

Across the surveyed enterprises, respondents reported digital colleagues are most commonly delivering value in four areas:[5]

1. **Automation and efficiency**: Enterprises are automating repetitive administrative and reporting tasks.

2. **Knowledge management, drafting, and retrieval**: Digital colleagues are synthesizing large volumes of enterprise documents, creating summary documents.

3. **Decision support recommendations and actions**: AI systems are providing benchmarking, policy guidance, opportunity identification, and project recommendations, and can take action—such as mitigating detected bank fraud—within guardrails.

4. **Customer and employee assistance**: AI is increasingly enabling call centers and internal service functions, replacing them or supporting their operators.

Enterprise use of digital colleagues is still heavily internal facing, but based on our conversations with executives, some enterprises are beginning to use digital colleagues in interactions with customers. Most enterprises currently measure value from digital colleagues in terms of productivity gains and consistency improvements rather than as new revenue streams.

4 Examples of pricing models include no change in pricing, subscription-based, value sharing, pricing and operating as shared infrastructure, variable pricing depending on whether a digital colleague or a human performs the task, and outcome-based pricing. However, most enterprises in our research have not yet changed their pricing model.

5 For details, see How We Approached This Project on page 2.

How We Approached This Project

We administered the MIT CISR 2025 Digital Colleagues Survey to 132 enterprises in early fall 2025. We asked about employee sentiment, what parts of the company were using digital colleagues, eight enterprise capabilities, pricing models, and eight sources of value. Two open-ended questions asked respondents to specifically give examples of the most valuable business tasks digital colleagues complete currently and tasks they expected would be valuable in twelve months. We synthesized and grouped the open-ended responses using ChatGPT 5.2 accessed via MIT's ChatGPT Enterprise account. We conducted an interview with an executive at Mallesons in September 2026 to create a case vignette about Mallesons' use of digital colleagues, then followed up with another interview and additional informal conversations in the first three months of 2026. We presented findings from this research during eight interactive sessions between fall 2025 and spring 2026.

In early 2026 we submitted the 50-slide PowerPoint deck from our presentations to ChatGPT 5.2 in MIT's ChatGPT Enterprise account to generate draft text for this publication. The authors iterated on the draft, adding new information from statistical analyses and insights from our presentations, deleting content, and moving paragraphs around. In the statistical analysis, we used regressions to identify what capabilities were significant in predicting the strength of eight types of value captured, including reduced cost of operations, improved customer experience, and increased productivity. We analyzed eight capabilities including level of use, use of human in the loop, governance maturity, redefined roles and metrics, employee sentiment, impact measurement, adapted workflows and technology stack, and level of AI integration. Three of the capabilities—adapted workflows, redefined roles and metrics, and level of use—were significant at the $p<.05$ level across multiple value measures.

The research is ongoing. Currently we are conducting in-depth interviews with senior executives and setting up research roundtables to discuss findings and explore how digital colleagues are changing work and helping create and capture value.

THREE CAPABILITIES TO CAPTURE VALUE FROM DIGITAL COLLEAGUES

We analyzed multiple kinds of value—such as reduced cost of operations, improved customer experience, and increased productivity—that enterprises can capture using digital colleagues.[6] Our analysis identified three enterprise capabilities that correlated with stronger value capture:

Redesigned workflows. Rather than layering AI onto existing processes, enterprises that redesigned workflows to integrate digital colleagues captured more value. Approximately twenty-two percent of the surveyed enterprises reported major workflow redesign.

Redefined roles and performance metrics. Enterprises that embedded digital colleagues into the workforce strategy—with clear role definitions, ownership, and accountability—captured more value. Nine percent of enterprises in our survey had begun to formally integrate digital colleagues.

High level of use. As enterprises' use of digital colleagues increased, the value that was captured increased. Thirty-four percent of surveyed enterprises were actively using digital colleagues, while another third were testing the viability of incorporating digital colleagues into work. Enterprises learned what works and then leveraged those learnings.

DIGITAL COLLEAGUES IN LEGAL SERVICES AT MALLESONS

Mallesons,[7] a large Australian commercial law firm, provides a vivid example of digital colleagues embedded in professional workflows. Mallesons is a leader in innovating using AI, adopting Harvey[8]—a domain-specific AI for legal and professional services—in early 2025 as a digital colleague to support tasks such as complex document drafting, redline summarization, litigation analysis, and due diligence. Mallesons actively engaged its workforce in implementing Harvey and has developed many new ways of working. The firm is capturing value by:

Redesigning workflows: Mallesons identified close to 300 use cases prior to scaling Harvey. The firm updates its AI strategy document monthly, working on more than forty internal legal workflows for servicing clients. This leads to faster clockspeed. A human is always in the loop.

Redefining roles and performance metrics: Mallesons has a capability framework for every role at the firm and has invested in the learning and development of its people to prepare them for an increasingly digital future. In addition, Mallesons has subject matter expert lawyers in each practice area (e.g., litigation, M&A) to work with the firm's Innovation Team as AI integration leads to drive AI use deeper into the firm.

Encouraging a high level of use: Mallesons developed a number of systematic enablers including in-house technology skills certification ("Legal Transformation Belts") and a firm-wide initiative ("Use It or Lose It") that allocates to lawyers productive hours per year for self-driven AI learning. Over 1,300 staff have been trained on Harvey, and 96 percent of legal staff are active users (50 percent access it more than four days per week). Active users report regularly reducing their cycle times for specific legal activities by 20 percent, increasing the quality of their outputs and using Harvey as a cognitive sparring partner or digital colleague.

Michelle Mahoney, chief innovation officer at Mallesons, summarized the firm's approach: "We need to reimagine every activity and the way we service our clients to operate in the era of AI. We don't say AI is a tool. We say it is a member of our team." This framing drives behavioral change, not just technical deployment.

Mallesons' effective use of Harvey is one step toward positioning the firm for long-term growth. Mallesons is also exploring new services, new revenue models, and creating a competitive advantage using AI.

REQUIREMENTS TO OUTPERFORM WITH DIGITAL COLLEAGUES

Digital colleagues represent a structural shift in how work is performed inside enterprises. They are not simply automation tools or chat interfaces. They are AI-enabled team members capable of executing complex tasks, collaborating across workflows, and operating continuously within defined governance boundaries.

Managing digital colleagues goes beyond managing the technology. It requires coordinated leadership across the CEO and top team, including the CIO, the chief human resources officer, and the chief risk officer. The enterprises that will outperform are not those with the most pilots using digital colleagues, but those that redesign work, clarify accountability, measure value rigorously, and align digital colleagues with strategic intent.

Managing digital colleagues responsibly is both a performance opportunity and a leadership obligation. Is your enterprise up for the challenge?

6 For details, see How We Approached This Project on page 2.

7 Mallesons merged with China's King & Wood in 2012 to form King & Wood Mallesons (KWM), but the firms separated on March 31, 2026 and now operate independently again; see "King & Wood Mallesons China and Australia partnerships announce formal separation," Media Center, Mallesons, December 9, 2025. The authors conducted two interviews plus additional informal conversations at the firm from fall 2025 to spring 2026.

8 Harvey is a fast-growing AI startup used by more than 100,000 lawyers across 1,000-plus organizations in 60 countries; see "Built for High Stakes Work," Customers, Harvey, accessed April 14, 2026.

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MIT CISR helps executives meet the challenge of leading increasingly digital and data-driven organizations. We provide insights on how organizations effectively realize value from approaches such as digital business transformation, data monetization, business ecosystems, and the digital workplace. Founded in 1974 and grounded in MIT's tradition of combining academic knowledge and practical purpose, we work directly with digital leaders, executives, and boards to develop our insights. Our research is funded by member organizations that support our work and participate in our consortium.

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